Amendments to the claims:

Following is a complete listing of the claims pending in the application, as amended:

1-12. (Cancelled)

- 13. (Currently amended) A method of identifying peptoids, in a library of different-sequence peptoids, which are effective in transfecting a cell with an oligonucleotide, the method comprising:
- (i) contacting each peptoid in the library with an oligonucleotide, to form a plurality of peptoid-oligonucleotide mixtures, wherein said oligonucleotide is between about 10 and 50 nucleotides in length, and said different-sequence peptoids include variations selected from different N-side chains, different terminal lipid moieties, and different distributions of neutral and cationic N-side chains;
 - (ii) contacting each said mixture with a cell;
- (iii) screening each cell for transfection of the oligonucleotide, to identify transfected cells; and
 - (iv) identifying transfecting peptoids in mixtures contacted with transfected cells.
- 14. (Original) The method of claim 13, wherein said library of peptoids is provided in an array of physically separated compartments.
- 15. (Previously presented) The method of claim 14, wherein said peptoids are supported on solid particles.
- 16. (Original) The method of claim 15, further comprising the step of releasing the peptoids from the particles in said compartments, prior to said contacting step (i).
- 17. (Original) The method of claim 15, wherein each compartment contains a single particle, and each particle contains a single peptoid.

18-20. (Cancelled)

21. (Previously presented) The method of claim 13, wherein, in step (ii), each said mixture is contacted with a plurality of distinct cell types.

22-23. (Cancelled)

24. (Original) The method of claim 13, wherein said different-sequence peptoids have the general formula I:

$$R^{a} \leftarrow \begin{array}{c} R^{b} & O \\ R^{a} \leftarrow \begin{array}{c} I \\ -CR^{1}R^{2} - C \end{array} \\ -R^{c} \end{array}$$

where

R^a is selected from the group consisting of alkyl, aryl, aralkyl, aralkenyl, and aralkynyl, any of which may be substituted with one or more groups X; hydrogen, -OH, -SH, -COOH, sulfonyl, and a lipid moiety, wherein said lipid moiety may be conjugated to a linker moiety,

each R^b is independently selected from the group consisting of alkyl, aryl, aralkyl, aralkenyl, and aralkynyl, any of which may be substituted with one or more groups X; and hydrogen,

wherein at least one group Rb is not hydrogen;

R^c is selected from the group consisting of alkyl, aryl, aralkyl, aralkenyl, and aralkynyl, any of which may be substituted one or more groups X; hydrogen, -OH, -SH, -NH₂, -NHR, -NH(C=O)R, where R is lower alkyl; sulfonyl, hydrazine, and a lipid moiety, wherein said lipid moiety may be conjugated to a linker moiety;

X is selected from hydroxy, alkoxy, amino, guanidino, amidino, alkylamino, alkylthio, halogen, nitro, cyano, keto, aldehyde, carboxylic acid, carboxylic ester, carboxylic amide, sulfonic acid and sulfonic ester;

R¹ and R² are independently selected from hydrogen, lower alkyl, and lower alkoxy; and

m is an integer selected from 2 to about 50.

- 25. (Original) The method of claim 24, wherein in formula I, R^a comprises a lipid moiety, and R^c is selected from -NH₂, -NHR, and -NH(C=O)R, where R is lower alkyl.
 - 26. (Original) The method of claim 25, wherein said lipid moiety is a sterol.
- 27. (Original) The method of claim 24, wherein in formula I, each of R¹ and R² is hydrogen.
- 28. (Original) The method of claim 24, wherein in formula I, at least one R^b includes a group which is cationic at physiologically relevant pH, and at least one R^b is uncharged at physiologically relevant pH.
- 29. (Previously presented) The method of claim 28, wherein said cationic group is selected from aminoalkyl, guanidino, amidino, imidazole, and pyridinium.
 - 30-32. (Cancelled)